



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

File
Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

October 29, 1985

Mr. Chad Green
Plant Engineer
Auxiliary Route No. 3
Morgan, Utah 84050

Dear Mr. Green:

Re: Follow up Letter of Ideal Basic Devil's Slide Site Tour,
ACT/029/001, Morgan County, Utah

I am writing concerning the site tour that was performed by Rick Summers and myself on August 28, 1985. The purpose of the site tour was to review the concerns that Ideal Basic had with the Drainage and Sediment Control sections of the Division's May 9, 1985 letter to Ideal Basic. In a meeting at the Division offices on August 8, 1985, representatives from Ideal Basic expressed concerns about proposing a drainage and sediment control plan due to space limitations at the quarry site. Ideal Basic also indicated that very little runoff occurred during a precipitation event at the quarry site and therefore erosion and sedimentation was not a problem.

After a site review of the quarry operations the Division is now able to clarify the review comments concerning drainage and sediment control and summarize the discussion we had in your office following the site review.

1. Pursuant to Rule M-10(11) the runoff and associated peak flows must be calculated for all distinct watersheds in the quarry area. Ideal Basic stated that the SCS curve number methodology (NEH-4, 1974) would be used to calculate the runoff volumes and peak flows for the design events. The selection of the curve number will be critical to determine these values. Ideal Basic indicated that they would contact a hydrologic consultant in order to help determine a curve number for the quarry area. The purpose of determining the runoff from the quarry area is to determine the amount of runoff from the disturbed area that is discharging into the Weber River and will be necessary to determine the design of a drainage and sediment control plan.

The use of existing depressions at the quarry site as catch basins may be an alternative to the construction of a single sediment pond capable of treating all disturbed area runoff. Due to the lack of space at the quarry site, a series of catch basins may be more feasible to treat runoff from the disturbed area.

The volume of the impoundment below the dust dump pile between Quarry #3 and Quarry # 2 should be calculated. The volume of this impoundment should be calculated in order to determine if it is capable of containing the runoff volume from the 10 year 24 hour precipitation event from the contributing watershed.

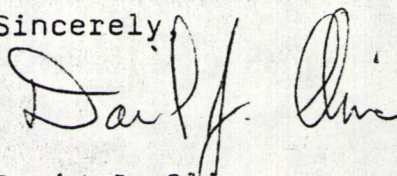
Additionally, in regard to Rule M-10(11) any berms that have been breached or damaged should be repaired as part of the overall drainage and sediment control plan. The berms should be repaired using silt fence, straw bales, rock gabions or other structures. I have included some information concerning these types of sediment control measures.

2. Pursuant to Rule M-10(8), calculations demonstrating the capacity of the filled ephemeral drainage west of Quarry #3 should be submitted. The "drain" should be capable of passing the runoff from the 100 year 24 hour precipitation event. Designs should also be submitted for any additional natural channels or valley bottoms that are to be altered or used as a disposal site.
3. Pursuant to Rule M-10(7) road drainage at the quarry site did not appear to be a problem. No evidence of significant erosion was evident on the roads during the site review. The method of road drainage and sediment control consisted of berms on the downslope side of the roads. Culverts and ditches have not been used due to the temporary nature of the roads during the quarry operations. Cross-sections of typical road sections should be submitted depicting the berms and how they will convey runoff from the roads.

Page 2
Mr. Chad Green
ACT/029/G01
October 29, 1985

I am also including a copy of the topsoil and vegetation guidelines that you requested. Please keep us informed of any new developments concerning the permit application that Ideal Basic is submitting. I will look forward to receiving a response to the above points. Please do not hesitate to contact myself or other staff members should you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "David J. Cline". The signature is fluid and cursive, with the first name "David" being more prominent than the last name "Cline".

David J. Cline
Reclamation Hydrologist

jvb
cc: Susan Linner
Rick Summers
0513R